DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
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Flex your power!
Be energy efficient!

October 10, 2013

07-LA-60-20.6
07-4H9004
Project ID 0700021079
NHP-P060(142)E

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN LOS ANGELES COUNTY AT ROWLAND HEIGHTS AT WESTBOUND OFF-RAMP TO NOGALES STREET.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Thursday, October 17, 2013.

This addendum is being issued to revise the project plans, the *Notice to Bidders and Special Provisions*, the *Bid* book, and *Information Handout*

Project plan sheet 26 is replaced and attached for substitution for the like-numbered sheet.

In the *Notice to Bidders and Special Provisions*, in the "STANDARD PLANS LIST," the following Standard Plan is added as follows:

"B0-1."

In the Special Provisions, Section 2-1.06B is replaced as follows.

The Department makes the following supplemental project information available:

Supplemental Project Information

Means	Description
Included in the *Information Handout*	1. Lead Site Investigation Reports 2. Landscape (Recycled Water) 3. Fiber Optic As Built Plans in Work Area 4. Geotechnical Design Report
Available as specified in the *Standard Specifications*	Retaining wall as-built drawings
Included with the project plans	Log of test borings

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In the Special Provisions, Section 20-7.01B(1) is deleted.

In the Special Provisions, Section 86, "ELECTRICAL SYSTEMS," is replaced as attached.

The *Information Handout* is replaced as attached.

In the *Bid* book, in the "Bid Item List," Items 21, 76, 77, and 86 are replaced as attached.

To *Bid* book holders:

In the *Bid* book, pages 4, 6, and 7 of the "Bid Item List" are replaced as attached. The attached Bid Item List is to be used in the bid.

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the *Notice to Bidders* section of the *Notice to Bidders and Special Provisions*.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the *Bid* book.

Submit bids in the *Bid* book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This addendum and attachments are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/07/07-4H9004

If you are not a *Bid* book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

CARRIE BOWEN
Acting District Director

Attachments

86 ELECTRICAL SYSTEMS

Add to the end of the 1st paragraph of section 86-1.01:

This work is shown on sheets labeled *E*. The work involved in each section 86 bid item is shown on a sheet with a sheet title matching the bid item description except for maintaining existing traffic management system elements during construction.

Add to section 86-1.01:

Traffic signal work must be performed at the following location:

1. Route 60 Westbound off ramp at Nogales Street

Add to section 86-1.03:

Submit a schedule of values within 5 days after Contract approval.

Add to the 4th paragraph of section 86-1.03:

13. Materials shown in the quantity tables on sheets labeled *E*

Replace the 3rd paragraph of section 86-1.06A with:

Traffic signal system shutdowns are limited to periods between the hours of 9:00 a.m. and 3:00 p.m.

Replace "Reserved" in section 86-1.06B with:

Traffic Management System (TMS) elements include, but are not limited to ramp metering (RM) system, communication system, traffic monitoring stations, video image vehicle detection system (VIVDS), microwave vehicle detection system (MVDS), loop detection system, changeable message sign (CMS) system, extinguishable message sign (EMS) system, highway advisory radio (HAR) system, closed circuit television (CCTV) camera system, roadway weather information system (RWIS), visibility sensor, and fiber optic system.

If the construction activities require existing TMS elements to be nonoperational or off line, and if temporary or portable TMS elements are not shown, provide for temporary or portable TMS elements. Obtain authorization on the type of temporary or portable TMS elements and installation method.

Fiber optic system as-built drawings will be available as an *Information Handout* as specified in section 2-1.06B.

Before work, the Engineer, the Department's Traffic Operations Electrical representatives, and you must jointly conduct a pre-construction operational status check of all existing TMS elements and each element's communication status with the Traffic Management Center (TMC), including existing TMS elements not shown and elements that may not be impacted by your activities. The Department's Traffic Operations Electrical representatives will certify the TMS elements' location and status, and provide a copy of the certified list of the existing TMS elements within the project limits to you. The status list will include the operational, defined as having full functionality, and the nonoperational components.

Obtain authorization at least 72 hours before interrupting existing TMS elements' communication with the TMC that will result in the elements being nonoperational or off line. Notify the Engineer at least 72 hours before starting excavation.

Traffic monitoring stations and their associated communication systems, which were verified to be operational during the pre-construction operational status check, must remain operational on freeway/highway mainline, except:

1. For a duration of up to 15 days on any continuous segment of the freeway/highway longer than 3 miles
2. For a duration of up to 60 days on any continuous segment of the freeway/highway shorter than 3 miles

If the construction activities require existing detection systems to be nonoperational or off line for a longer time period or the spacing between traffic monitoring stations is more than the specified criteria, and temporary or portable detection operations are not shown, provide provisions for temporary or portable detection operations. You must receive authorization on the type of detection and installation before installing the temporary or portable detection.

If existing TMS elements shown or identified during the pre-construction operational status check, except traffic monitoring stations, are damaged or fail due to your activity, where the elements are not fully functional, immediately notify the Engineer. If the Engineer notifies you that existing TMS elements have been damaged, have failed or are not fully functional due to your activity, the damaged or failed TMS elements, excluding structure-related elements, must be repaired or replaced, at your expense, within 24 hours. For a structure-related elements, you must install temporary or portable TMS elements within 24 hours. For nonstructure-related TMS elements, the Engineer may authorize temporary or portable TMS elements for use during construction.

If fiber optic cables are damaged due to your activities, install new fiber optic cables from an original splice point or termination to an original splice point or termination, unless otherwise authorized. Fiber optic cable must be spliced at the splice vaults if available. The amount of new fiber optic cable slack in splice vaults and the number of new fiber optic cable splices must be equivalent to the amount of slack and number of splices existing before the damage. Fusion splicing is required.

Demonstrate that repaired or replaced elements operate equal to or better than the replaced equipment. If you fail to perform required repairs or replacement work, the Department may perform the repair or replacement work and the cost will be deducted from monies due.

A TMS element is considered nonoperational or off line for the duration of time that active communications with the TMC is disrupted, resulting in messages and commands not transmitted from or to the TMS element.

Provide provisions for replacing existing TMS elements within the project limits, including detection systems, that were not identified on the plans or during the pre-construction operational status check that became damaged due to your activities.

If the pre-construction operational status check identified existing TMS elements, you, the Engineer, and the Department's Traffic Operations Electrical representatives must jointly conduct a post construction operational status check of all existing TMS elements and each element's communication status with the TMC. The Department's Traffic Operations Electrical representatives will certify the TMS elements' status and provide you a copy of the certified list of the existing TMS elements within the project limits. The status list will include the operational, defined as having full functionality, and the nonoperational components. TMS elements that cease to be functional between pre and post construction status checks must be repaired at your expense.

The Engineer will authorize the schedule for final replacement, the replacement methods and the replacement elements, including element types and installation methods before repair or replacement work is performed. The final TMS elements must be new and of equal or better quality than the existing TMS elements.

If no electrical work exists on the project and no TMS elements are identified within the project limits, the pre-construction operational status check is change order work.

Furnishing and installing temporary or portable TMS elements that are not shown, but are required when an existing TMS element becomes nonoperational or off line due to construction activities, is change order work.

Furnishing and installing temporary or portable TMS elements and replacing TMS elements that are not shown nor identified during the pre-construction operational status check and were damaged by construction activities is change order work.

If you are required to submit provisions for the replacement of TMS elements that were not identified, submitting the provisions is change order work.

Add to section 86-2.05A:

Conduit installed underground must be Type 1.

Add to section 86-2.05B:

The conduit in a foundation and between a foundation and the nearest pull box must be Type 1.

After conductors have been installed, the ends of the conduits terminating in pull boxes must be sealed with an authorized type of sealing compound.

Replace the 3rd paragraph in section 86-2.06A(2) of the RSS for section 86-2.06 with:

In a ground or sidewalk area, embed the bottom of a pull box in crushed rock.

Replace "Reserved" in section 86-2.06B of the RSS for section 86-2.06 with:

86-2.06B(1) General

86-2.06B(1)(a) Summary

Section 86-2.06B includes specifications for installing non-traffic-rated pull boxes.

86-2.06B(1)(b) Submittals

Before shipping pull boxes to the jobsite, submit a list of materials, Contract number, pull box manufacturer, manufacturer's instructions for pull box installation, and your contact information to METS.

Submit reports for pull box from an NRTL-accredited lab.

86-2.06B(1)(c) Quality Control and Assurance

86-2.06B(1)(c)(i) General

Pull boxes may be tested by the Department. Deliver pull boxes and covers to METS and allow 30 days for testing. When testing is complete, you will be notified. You must pick up the boxes and covers from the test site and deliver it to the job site.

Any failure of the pull box or the cover that renders the unit noncompliant with these specifications will be a cause for rejection. If the unit is rejected, you must allow 30 days for retesting. Retesting period starts when the replacement pull box is delivered to the test site. You must pay for all retesting costs. Delays resulting from the submittal of noncompliant materials does not relieve you from executing the Contract within the allotted time.

If the pull box submitted for testing does not comply with the specifications, remove the unit from the test site within 5 business days after notification that it is rejected. If the unit is not removed within that period, it may be shipped to you at your expense.

You must pay for all shipping, handling, and transportation costs related to the testing and retesting.

86-2.06B(1)(c)(ii) Functional Testing

The pull box and cover must be tested under ANSI/SCTE 77, "Specification for Underground Enclosure Integrity."

86-2.06B(1)(c)(iii) Warranty

Provide a 2-year manufacturer replacement warranty for pull box and cover from the date of installation of the pull box and cover. All warranty documentation must be submitted before installation.

Replacement parts must be provided within 5 business days after receipt of failed pull box, cover, or both at no cost to the Department and must be delivered to the Department's Maintenance Electrical Shop at Pomona
Electrical Maintenance Shop
1698 West Mission Boulevard
Pomona, CA 91767
(909) 629-3577

86-2.06B(2) Materials

The pull box and cover must comply with ANSI/SCTE 77, "Specification for Underground Enclosure Integrity," for tier 22 load rating and must be gray or brown.

Each pull box cover must have an electronic marker cast inside.

Extension for the pull box must be of the same material as the pull box and attached to the pull box to maintain the minimum combined depths as shown.

Include recesses for a hanger if a transformer or other device must be placed in a pull box.

The bolts, nuts, and washers must be a captive bolt design.

The captive bolt design must be capable of withstanding a torque range of 55 to 60 ft-lb and a minimum pull out strength of 750 lb. Perform the test with the cover in place and the bolts torqued. The pull box and cover must not be damaged while performing the test to the minimum pull out strength.

Stainless steel hardware must have an 18 percent chromium content and an 8 percent nickel content.

Galvanize ferrous metal parts under section 75-1.05.

Manufacturer's instructions must provide guidance on:

1. Quantity and size of entries that can be made without degrading the strength of the pull box below tier 22 load rating
2. Where side entries cannot be made
3. Acceptable method to be used to create the entry

Tier 22 load rating must be labeled or stenciled by the manufacturer on the inside and outside of the pull box and on the underside of the cover.

86-2.06B(3) Construction

Do not install pull box in curb ramps or driveways.

A pull box for a post or a pole standard must be located within 5 feet of the standard. Place a pull box adjacent to the back of the curb or edge of the shoulder. If this is impractical, place the pull box in a suitable, protected, and accessible location.

Bury pull box in soil 6 to 8 inches below grade. Cover the pull box with a plastic sheet before burying it.

Plastic sheets must be 20 mil thick and made of HDPE or PVC virgin compounds.

If only the cover is to be replaced, anchor the cover to the pull box.

For pull boxes with a tamper resistant cover adjacent to lighting standards, install a 10 Amp fuse inside the pull box and a 5 Amp fuse in the circuit in the lighting standard handhole.

Add to section 86-2.06

86-2.06D TAMPER RESISTANT COVER FOR NON-TRAFFIC PULL BOX 86-2.06D(1) General

86-2.06D(1)(a) Summary

This work includes installing tamper resistant (TR) cover on pull box.

Do not order pull box cover if TR is used for new installation. Salvage pull box cover if installing TR on existing pull box.

86-2.06D(1)(b) Submittals

Before shipping TR cover and accessories to the job site, submit a list of materials, contract number, manufacturer's name, and manufacturer's instructions for installation.

Submit warranty documentation before installation.

86-2.06D(1)(c) Quality Control and Assurance

86-2.06D(1)(c)(i) Warranty

Provide a 2-year replacement warranty from the manufacturer of the TR cover and accessories against any defects or failures. The effective date of the warranty is the date of final acceptance.

Provide replacement parts within 5 business days after receipt of failed parts. The department does not pay for replacement parts. Deliver replacement parts to the following Department's Maintenance Electrical Shop:

Pomona Electrical Maintenance Shop
1698 West Mission Boulevard
Pomona, CA 91767
(909) 629-3577

86-2.06D(2) Materials

Provide the following:

1 A cover welded in the factory, all around to 7 inch deep security skirt sized to encase the pull box. The cover must be of steel tread plate. Cover must be 1/2 inch thick minimum and of non skid surface. The security skirt must be of steel 3/8 inch thick minimum.
2. Cover must be marked for the application as shown.
3. L shape steel anchor rod not less than 1 inch diameter by 4 feet long for the No. 5 pull box, 1 inch diameter by 5 feet long for No. 6 pull box.
4. Top cap of stainless steel, steel hex nuts and lock nuts.
5. Epoxy.
6. Steel plate 3/16" X 3" X 8".

TR cover and accessories must be manufactured by one of the following companies or equal:

1. Factory Direct Fastening (FDF), 1608 A North Hillhurst Ave., Los Angeles, CA 90027. Telephone (800) 942-4844.
2. ERC, Inc, 2970 E Maria, Rancho Dominguez, CA 90221. Telephone (310) 603-2970.
3. Pendarvis Manufacturing, 1808 American St., Anaheim, CA 92801. Telephone (714) 992-0950.
4. Case Automation Corp, 5920 Rickenbacker Ave., Riverside, CA. 92504. Telephone (951) 202-7088 or (951) 493-6666.

TR cover and accessories design manufactured by FDF is patented and royalty payments may apply.

Stainless steel hardware must have an 18 percent chromium content and an 8 percent nickel content.

Galvanize ferrous metal parts must comply with section 75-1.05.

Provide epoxy to fill the lock nut socket space. Epoxy must conform to Loc-tite #E-120HP or Scotch-weld # DP460 or Devcon Plus25 #14278 or equivalent.

86-2.06D(3) Construction

Top of TR cover must be flush with final grade.

Install TR cover as follows:

1. Dig 8 inch diameter by 5 or 6 feet deep hole and install L shape steel anchor rod, set center of the pull box to coincide with the anchor rod. Include a provision for drain hole for the pull box.
2. Install pull box over the L shape steel anchor rod and conduits.
3. Stabilize and align the anchor rod. Ensure the anchor rod is vertical and concentric with the pull box.
4. Pour concrete around anchor rod and outside pull box. Concrete outside pull box must be 7 inch below finished grade and the skirt will rest on this concrete.
5. Bond and ground TR cover.
6. Position the TR cover to encase the pull box. Secure TR cover to the anchor rod with penta head nut.
7. Add epoxy to fill the lock nut socket space.
8. Fix top cap.
9. Tag-weld steel plate across the socket over the top cap lock nut.

86-2.06D(4) Payment

Not Used.

Add to section 86-2.08A:

Wrap conductors around the projecting end of conduit in pull boxes as shown.

Replace the 1st paragraph of section 86-2.09E with:

Splices must be insulated by "Method B."

Delete the 6th and 7th paragraphs of section 86-2.09E.

Add to section 86-5.01A(1):

Loop wire must be Type 2.

Loop detector lead-in cable must be Type B.

Slots must be filled with hot-melt rubberized asphalt sealant.

For Type E detector loops, sides of the slot must be vertical and the minimum radius of the slot entering and leaving the circular part of the loop must be 1-1/2 inches. Slot width must be a maximum of 5/8 inch. Loop wire for circular loops must be Type 2. Slots of circular loops must be filled with hot-melt rubberized asphalt sealant.

The depth of the loop sealant above the top of the uppermost loop wire in the sawed slots must be 2 inches, minimum.

BID ITEM LIST
07-4H9004

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	150711	REMOVE PAINTED TRAFFIC STRIPE	LF	2,090		
22	150712	REMOVE PAINTED PAVEMENT MARKING	SQFT	300		
23	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	870		
24	150715	REMOVE THERMOPLASTIC PAVEMENT MARKING	SQFT	360		
25	150722	REMOVE PAVEMENT MARKER	EA	150		
26	150742	REMOVE ROADSIDE SIGN	EA	3		
27	150771	REMOVE ASPHALT CONCRETE DIKE	LF	470		
28	152386	RELOCATE ROADSIDE SIGN-ONE POST	EA	8		
29	152430	ADJUST INLET	EA	1		
30	153215	REMOVE CONCRETE (CURB AND GUTTER)	LF	680		
31	160102	CLEARING AND GRUBBING (LS)	LS	LUMP SUM	LUMP SUM	
32	190101	ROADWAY EXCAVATION	CY	580		
33	190105	ROADWAY EXCAVATION (TYPE Z-2) (AERIALLY DEPOSITED LEAD)	CY	380		
34 (F)	192001	STRUCTURE EXCAVATION	CY	54		
35 (F)	192037	STRUCTURE EXCAVATION (RETAINING WALL)	CY	1,328		
36 (F)	193001	STRUCTURE BACKFILL	CY	15		
37 (F)	193013	STRUCTURE BACKFILL (RETAINING WALL)	CY	1,466		
38 (F)	193031	PERVIOUS BACKFILL MATERIAL (RETAINING WALL)	CY	110		
39	200002	ROADSIDE CLEARING	LS	LUMP SUM	LUMP SUM	
40	200120	CULTIVATE	SQYD	320		

REPLACED PER ADDENDUM NO. 2 DATED OCTOBER 10, 2013

BID ITEM LIST
07-4H9004

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	208906	EXTEND 8" CONDUIT	LF	15		
62	209202	RECYCLED WATER WARNING SIGNS	LS	LUMP SUM	LUMP SUM	
63	260303	CLASS 3 AGGREGATE BASE (CY)	CY	670		
64	360200	BASE BOND BREAKER	SQYD	1,140		
65	280000	LEAN CONCRETE BASE	CY	230		
66	280015	LEAN CONCRETE BASE RAPID SETTING	CY	110		
67	390132	HOT MIX ASPHALT (TYPE A)	TON	280		
68	394073	PLACE HOT MIX ASPHALT DIKE (TYPE A)	LF	10		
69	394074	PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	99		
70	401050	JOINTED PLAIN CONCRETE PAVEMENT	CY	180		
71	026485	JOINTED PLAIN CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)	CY	210		
72	490508	FURNISH STEEL PILING (HP 10 X 57)	LF	5,968		
73	490509	DRIVE STEEL PILE (HP 10 X 57)	EA	152		
74 (F)	510050	STRUCTURAL CONCRETE	CY	18		
75 (F)	510060	STRUCTURAL CONCRETE, RETAINING WALL	CY	556		
76 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	CY	9		
77 (F)	510526	MINOR CONCRETE (BACKFILL)	CY	27		
78 (F)	520101	BAR REINFORCING STEEL	LB	2,070		
79 (F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	LB	63,635		
80	562002	METAL (BARRIER MOUNTED SIGN)	LB	190		

REPLACED PER ADDENDUM NO. 2 DATED OCTOBER 10, 2013

BID ITEM LIST
07-4H9004

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81	566011	ROADSIDE SIGN - ONE POST	EA	2		
82	650018	24" REINFORCED CONCRETE PIPE	LF	42		
83	665017	18" CORRUGATED STEEL PIPE (.079" THICK)	LF	300		
84 (F)	721017	ROCK SLOPE PROTECTION (FACING, METHOD B) (CY)	CY	6		
85	731504	MINOR CONCRETE (CURB AND GUTTER)	CY	12		
86 (F)	750001	MISCELLANEOUS IRON AND STEEL	LB	2,191		
87	750007	FRAME AND GRATE	EA	7		
88 (F)	750500	MISCELLANEOUS METAL	LB	1,365		
89 (F)	026486	MISCELLANEOUS METAL (SCREENED PIPE)	LB	1,091		
90	832003	METAL BEAM GUARD RAILING (WOOD POST)	LF	50		
91	832070	VEGETATION CONTROL (MINOR CONCRETE)	SQYD	56		
92	839541	TRANSITION RAILING (TYPE WB)	EA	1		
93	839584	ALTERNATIVE IN-LINE TERMINAL SYSTEM	EA	1		
94	839585	ALTERNATIVE FLARED TERMINAL SYSTEM	EA	1		
95 (F)	839721	CONCRETE BARRIER (TYPE 732A)	LF	479		
96 (F)	839723	CONCRETE BARRIER (TYPE 732B)	LF	59		
97	840504	4" THERMOPLASTIC TRAFFIC STRIPE	LF	1,830		
98	840515	THERMOPLASTIC PAVEMENT MARKING	SQFT	780		
99	026487	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 16-8)	LF	1,080		
100	840656	PAINT TRAFFIC STRIPE (2-COAT)	LF	2,320		

REPLACED PER ADDENDUM NO. 2 DATED OCTOBER 10, 2013